

In the Claims

Under 37 C.F.R. § 1.121(c), please cancel claims 1-24 without prejudice, and add new claims 25-51 as indicated below. A complete listing of claims is provided pursuant to 37 C.F.R. § 1.121(c)(1):

1. to 24. (CANCELED)
25. (NEW) A polypeptide comprising a sequence selected from the group consisting of:
 - (a) ILLWQPIPV (SEQ ID NO: 1),
 - (b) a derivative sequence of SEQ ID NO: 1, said derivative sequence having one or more amino acid deletions, additions, or substitutions,
 - (c) CPRFQELESETLKSE (SEQ ID NO: 2),
 - (d) a derivative sequence of SEQ ID NO: 2, said derivative sequence having one or more amino acid deletions, additions or substitutions, and
 - (e) a fragment sequence of sequence (a), (b), (c), or (d);wherein the polypeptide has HLA class-I restricted activity.
26. (NEW) An isolated nucleic acid molecule comprising a sequence selected from the group consisting of:
 - (a) a nucleic acid molecule encoding the polypeptide of claim 25; and
 - (b) a nucleic acid molecule, the complementary strand of which specifically hybridises to a nucleic acid molecule encoding the polypeptide of claim 25.
27. (NEW) A vector comprising a nucleic acid molecule according to claim 26.
28. (NEW) A host cell comprising a vector according to claim 27.
29. (NEW) A monoclonal antibody capable of specifically binding to the polypeptide of claim 25.
30. (NEW) A method of detecting or monitoring cancer in a patient, the method comprising the step of detecting or monitoring elevated levels of the nucleic acid molecule according to claim 26 in a sample from the patient.
31. (NEW) A method of detecting or monitoring cancer in a patient, the method comprising the step of detecting or monitoring elevated levels of the nucleic acid molecule according to claim 26 with another nucleic acid molecule or a probe in combination with a reverse transcription polymerase chain reaction.

32. (NEW) A method of detecting or monitoring cancer in a patient, the method comprising the step of detecting or monitoring elevated levels of the polypeptide according to claim 25.

33. (NEW) The method according to claim 32 wherein the detecting or monitoring step includes an antibody selective for the polypeptide of claim 25 to detect the polypeptide.

34. (NEW) The method according to claim 33 further comprising the step of using an enzyme-linked immunosorbant assay.

35. (NEW) The method according to claim 30 wherein the cancer is a prostate cancer.

36. (NEW) A method of prophylaxis or treatment of cancer in a patient, the method comprising the step of administering to the patient a pharmaceutically effective amount of the nucleic acid molecule according to claim 26, or a pharmaceutically effective fragment thereof.

37. (NEW) A method of prophylaxis or treatment of cancer in a patient, the method comprising the step of administering to the patient a pharmaceutically effective amount of a nucleic acid molecule hybridisable under high stringency conditions to the nucleic acid molecule according to claim 26, or a pharmaceutically effective fragment thereof.

38. (NEW) A method of prophylaxis or treatment of cancer in a patient, the method comprising the step of administering to the patient a pharmaceutically effective amount of a polypeptide according to claim 25, or a pharmaceutically effective fragment thereof.

39. (NEW) A method of prophylaxis or treatment of cancer in a patient, the method comprising the step of administering to the patient a pharmaceutically effective amount of the monoclonal antibody according to claim 29.

40. (NEW) The method of prophylaxis or treatment of cancer according to claim 36, wherein the cancer is a prostate cancer.

41. (NEW) A polypeptide comprising a protein carrier, which is not PAP or another fragment of PAP, covalently attached to the polypeptide according to claim 25, or a pharmaceutically effective fragment thereof.

42. (NEW) A nucleic acid molecule encoding a polypeptide according to claim 41.

43. (NEW) A vaccine comprising the nucleic acid molecule according to claim 26, or a pharmaceutically effective fragment thereof; and a pharmaceutically acceptable carrier.

44. (NEW) A vaccine comprising (a) the polypeptide according to claim 25, or a pharmaceutically effective fragment thereof, where said polypeptide or fragment thereof is optionally attached to an immunogen which is not PAP or another fragment of PAP, and (b) a pharmaceutically acceptable carrier.

45. (NEW) A vaccine comprising (a) the polypeptide according to claim 41 or a pharmaceutically effective fragment thereof, where said polypeptide or fragment thereof is optionally attached to an immunogen which is not PAP or another fragment of PAP, and (b) a pharmaceutically acceptable carrier.

46. (NEW) An immunogenic composition comprising a nucleic acid molecule comprising the nucleic acid sequence according to claim 26 or a pharmaceutically effective fragment thereof, and a pharmaceutically acceptable carrier.

47. (NEW) A immunogenic composition comprising (a) the polypeptide according to claim 25 or a pharmaceutically effective fragment thereof, where said polypeptide or fragment thereof is optionally attached to an immunogen which is not PAP or another fragment of PAP, and (b) a pharmaceutically acceptable carrier.

48. (NEW) A immunogenic composition comprising (a) the polypeptide according to claim 41 or a pharmaceutically effective fragment thereof, where said polypeptide or fragment thereof is optionally attached to an immunogen which is not PAP or another fragment of PAP, and (b) a pharmaceutically acceptable carrier.

49. (NEW) A kit comprising the polypeptide according to claim 25 for use with a method of detecting or monitoring cancer.

50. (NEW) A kit comprising the nucleic acid molecule according to claim 26 for use with a method of detecting or monitoring cancer.

51. (NEW) A kit comprising the monoclonal antibody according to claim 29 for use with a method of detecting or monitoring cancer.